Notice of Allowability	**Application No.** 10/683,796	**Applicant(s)** COOK ET AL.	
	Examiner Mujtaba K. Chaudry	**Art Unit** 2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *10/10/2003*.

2. ☒ The allowed claim(s) is/are *8-10*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)
1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's ~~Amendment~~/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

GUY LAMARRE
PRIMARY EXAMINER

4/26/06

DETAILED ACTION

Continued Prosecution Application

Applicants' reference is acknowledged with regards to parent application, 09628474 which is now abandoned. Examiner hereby acknowledges corrections made to the specification and drawings of the present application that were pointed out in the parent. This application is in condition for allowance.

Preliminary Amendment

Applicants' preliminary amendment to the claims has been entered. Claims 8-10 remain in the application.

Oath/Declaration

The Oath filed October 10, 2003 complies with all the requirements set forth in MPEP 602 and therefore is accepted.

Drawings

The amended drawings filed October 10, 2003 have been received and have been reviewed and they are accepted.

Specification

The amendments to the specification filed October 10, 2003 have been received and have been reviewed and they are accepted.

Response to Arguments

Applicant's arguments, see remarks, filed October 10, 2003, with respect to claims 8-10 have been fully considered and are persuasive. The previous rejections are withdrawn.

REASONS FOR ALLOWANCE

Claims 8-10 are allowed. The following is an Examiner's statement of reasons for allowance:

Independent claim 8 of the present application teaches a de-serializing circuit for receiving a sub-vector that is a subset of Q-many bits associated with a previous serialization and whose de-serialized version is one member of a sequential plurality of similarly de-serialized received sub-vectors that combine to form a complete receive vector that is subsequently operated upon a test system comprising: Q-many MUXs, each MUX having at least Q+1 many data inputs to which are coupled the bits of a receive sub-vector to be de-serialized, the correspondence between the Q+1 many data inputs and the bits of the receive sub-vector to be de-serialized being same for each MUX; each MUX having an output bit that will represent the signal at one of the Q+1 many data inputs at that MUX; Q-many latches, each latch associated with a MUX and having an input coupled to the output bit of its associated MUX and also having an output coupled to an input of its associated MUX; each MUX also having a collection of at least m control inputs, 2^m >= Q+1, to which are coupled, for each MUX, a corresponding separate collection of control signals whose values indicated which of the Q+1 many data inputs will have its signal coupled to the output bit of that MUX; a memory having an address and containing addressable locations each storing a set of control signal values of Q*m many bits representing the respective values of the m many control signals for the Q many MUXs and also having data outputs coupling members of the set of control signal values to the control inputs of their respective MUXs; the output bits for the Q-many MUXs forming an accumulated latched collection of sub-vectors constituting a de-serialized receive vector, according to a de-serialization defined by the addressed set of control signal values; and a programmatically controlled address applied to the memory and that selects a predefined de-serialization stored in the memory and that is to be performed upon the receive sub-vectors. The foregoing limitations are not found in the prior arts of record. Particularly, none of the prior arts of record teach or fairly suggest, "...Q-many MUXs, each MUX having at least Q+1 many data inputs to which are coupled the bits of a receive sub-vector to be de-serialized, the correspondence between the Q+1 many data inputs and the bits of the receive sub-vector to be de-serialized being same for each MUX; each MUX having an output bit that will represent the signal at one of the Q+1 many data inputs at that MUX; Q-many latches, each latch associated with a MUX and having an input coupled to the output bit of its associated MUX and also having an output coupled to an input of its associated MUX; each MUX also having a collection of at least m control inputs, 2^m >= Q+1, to which are coupled, for each MUX, a corresponding separate collection of control signals whose values indicated which of the Q+1 many data inputs will have its signal coupled to the output bit of that MUX; a memory having an address and containing addressable locations each storing a set of control signal values of Q*m many bits representing the respective values of the m many control signals for the Q many MUXs and also having data outputs coupling members of the set of control signal values to the control inputs of their respective MUXs; the output bits for the Q-many MUXs forming an accumulated latched collection of sub-vectors constituting a de-serialized receive vector, according to a de-serialization defined by the addressed set of control signal values; and a programmatically controlled address applied to the memory and that selects a predefined de-serialization stored in the memory and that is to be performed upon the receive sub-vectors…" are not taught nor fairly suggested in the prior arts of record.

Independent claims 9 and 10 include similar limitations of independent claim 8 and therefore are allowed for similar reasons.

Any inquiries concerning this communication should be directed to the examiner, Mujtaba Chaudry who may be reached at 571-272-3817. The examiner may normally be reached Mon – Thur 6:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, please contact the examiner's supervisor, Albert DeCady at 571-272-3819.

Mujtaba Chaudry
Art Unit 2133
April 26, 2006

GUY LAMARRE
PRIMARY EXAMINER